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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Mon Jun 04 17:32:57 EDT 2007

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Reviewer Comments:

atgagacgaa catctgttga gtaa

7584

12

Please delete the "12" above (at the end of the submitted file, after Sequence 2)

Application No: 10568414 Version No: 1.0

Input Set:

Output Set:

Started: 2007-06-01 16:02:37.824
Finished: 2007-06-01 16:02:38.520
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 696 ms
Total Warnings: 0
Total Errors: 2
No. of SeqIDs Defined: 2
Actual SeqID Count: 2

Error code	Error Description
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (2)

SEQUENCE LISTING

<110> Aasly, Jan O
Wszolek, Zbigniew K
Farrer, Matthew J

<120> Polynucleotide

<130> U1913

<140> 10568414
<141> 2007-06-01

<150> NO20045612
<151> 2004-12-23

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<170> PatentIn version 3.1

<210> 1
<211> 2527
<212> PRT
<213> Homo sapiens

<220>
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<222> (2019)..(2019)
<223> X may be any amino acid except glycine.

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<309> 2004-11-15
<313> (1)..(2527)

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35 40 45

Glu His Ala Ser Lys Leu Phe Gln Gly Lys Asn Ile His Val Pro Leu
50 55 60

Leu Ile Val Leu Asp Ser Tyr Met Arg Val Ala Ser Val Gln Gln Val
65 70 75 80

Gly Trp Ser Leu Leu Cys Lys Leu Ile Glu Val Cys Pro Gly Thr Met
85 90 95

Gln Ser Leu Met Gly Pro Gln Asp Val Gly Asn Asp Trp Glu Val Leu
100 105 110

Gly Val His Gln Leu Ile Leu Lys Met Leu Thr Val His Asn Ala Ser
115 120 125

Val Asn Leu Ser Val Ile Gly Leu Lys Thr Leu Asp Leu Leu Leu Thr
130 135 140

Ser Gly Lys Ile Thr Leu Leu Ile Leu Asp Glu Glu Ser Asp Ile Phe
145 150 155 160

Met Leu Ile Phe Asp Ala Met His Ser Phe Pro Ala Asn Asp Glu Val
165 170 175

Gln Lys Leu Gly Cys Lys Ala Leu His Val Leu Phe Glu Arg Val Ser
180 185 190

Glu Glu Gln Leu Thr Glu Phe Val Glu Asn Lys Asp Tyr Met Ile Leu
195 200 205

Leu Ser Ala Ser Thr Asn Phe Lys Asp Glu Glu Glu Ile Val Leu His
210 215 220

Val Leu His Cys Leu His Ser Leu Ala Ile Pro Cys Asn Asn Val Glu
225 230 235 240

Val Leu Met Ser Gly Asn Val Arg Cys Tyr Asn Ile Val Val Glu Ala
245 250 255

Met Lys Ala Phe Pro Met Ser Glu Arg Ile Gln Glu Val Ser Cys Cys
260 265 270

Leu Leu His Arg Leu Thr Leu Gly Asn Phe Phe Asn Ile Leu Val Leu
275 280 285

Asn Glu Val His Glu Phe Val Val Lys Ala Val Gln Gln Tyr Pro Glu
290 295 300

Asn Ala Ala Leu Gln Ile Ser Ala Leu Ser Cys Leu Ala Leu Leu Thr
305 310 315 320

Glu Thr Ile Phe Leu Asn Gln Asp Leu Glu Glu Lys Asn Glu Asn Gln
325 330 335

Glu Asn Asp Asp Glu Gly Glu Glu Asp Lys Leu Phe Trp Leu Glu Ala
340 345 350

Cys Tyr Lys Ala Leu Thr Trp His Arg Lys Asn Lys His Val Gln Glu
355 360 365

Ala Ala Cys Trp Ala Leu Asn Asn Leu Leu Met Tyr Gln Asn Ser Leu
370 375 380

His Glu Lys Ile Gly Asp Glu Asp Gly His Phe Pro Ala His Arg Glu
385 390 395 400

Val Met Leu Ser Met Leu Met His Ser Ser Ser Lys Glu Val Phe Gln
405 410 415

Ala Ser Ala Asn Ala Leu Ser Thr Leu Leu Glu Gln Asn Val Asn Phe
420 425 430

Arg Lys Ile Leu Leu Ser Lys Gly Ile His Leu Asn Val Leu Glu Leu
435 440 445

Met Gln Lys His Ile His Ser Pro Glu Val Ala Glu Ser Gly Cys Lys
450 455 460

Met Leu Asn His Leu Phe Glu Gly Ser Asn Thr Ser Leu Asp Ile Met
465 470 475 480

Ala Ala Val Val Pro Lys Ile Leu Thr Val Met Lys Arg His Glu Thr
485 490 495

Ser Leu Pro Val Gln Leu Glu Ala Leu Arg Ala Ile Leu His Phe Ile
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Val Pro Gly Met Pro Glu Glu Ser Arg Glu Asp Thr Glu Phe His His
515 520 525

Lys Leu Asn Met Val Lys Lys Gln Cys Phe Lys Asn Asp Ile His Lys

530	535	540
Leu Val Leu Ala Ala Leu Asn Arg Phe Ile Gly Asn Pro Gly Ile Gln		
545	550	555
560		
Lys Cys Gly Leu Lys Val Ile Ser Ser Ile Val His Phe Pro Asp Ala		
565	570	575
Leu Glu Met Leu Ser Leu Glu Gly Ala Met Asp Ser Val Leu His Thr		
580	585	590
Leu Gln Met Tyr Pro Asp Asp Gln Glu Ile Gln Cys Leu Gly Leu Ser		
595	600	605
Leu Ile Gly Tyr Leu Ile Thr Lys Lys Asn Val Phe Ile Gly Thr Gly		
610	615	620
His Leu Leu Ala Lys Ile Leu Val Ser Ser Leu Tyr Arg Phe Lys Asp		
625	630	635
640		
Val Ala Glu Ile Gln Thr Lys Gly Phe Gln Thr Ile Leu Ala Ile Leu		
645	650	655
Lys Leu Ser Ala Ser Phe Ser Lys Leu Leu Val His His Ser Phe Asp		
660	665	670
Leu Val Ile Phe His Gln Met Ser Ser Asn Ile Met Glu Gln Lys Asp		
675	680	685
Gln Gln Phe Leu Asn Leu Cys Cys Lys Cys Phe Ala Lys Val Ala Met		
690	695	700
Asp Asp Tyr Leu Lys Asn Val Met Leu Glu Arg Ala Cys Asp Gln Asn		
705	710	715
720		
Asn Ser Ile Met Val Glu Cys Leu Leu Leu Gly Ala Asp Ala Asn		
725	730	735
Gln Ala Lys Glu Gly Ser Ser Leu Ile Cys Gln Val Cys Glu Lys Glu		
740	745	750
Ser Ser Pro Lys Leu Val Glu Leu Leu Leu Asn Ser Gly Ser Arg Glu		
755	760	765

Gln Asp Val Arg Lys Ala Leu Thr Ile Ser Ile Gly Lys Gly Asp Ser
770 775 780

Gln Ile Ile Ser Leu Leu Leu Arg Arg Leu Ala Leu Asp Val Ala Asn
785 790 795 800

Asn Ser Ile Cys Leu Gly Gly Phe Cys Ile Gly Lys Val Glu Pro Ser
805 810 815

Trp Leu Gly Pro Leu Phe Pro Asp Lys Thr Ser Asn Leu Arg Lys Gln
820 825 830

Thr Asn Ile Ala Ser Thr Leu Ala Arg Met Val Ile Arg Tyr Gln Met
835 840 845

Lys Ser Ala Val Glu Glu Gly Thr Ala Ser Gly Ser Asp Gly Asn Phe
850 855 860

Ser Glu Asp Val Leu Ser Lys Phe Asp Glu Trp Thr Phe Ile Pro Asp
865 870 875 880

Ser Ser Met Asp Ser Val Phe Ala Gln Ser Asp Asp Leu Asp Ser Glu
885 890 895

Gly Ser Glu Gly Ser Phe Leu Val Lys Lys Lys Ser Asn Ser Ile Ser
900 905 910

Val Gly Glu Phe Tyr Arg Asp Ala Val Leu Gln Arg Cys Ser Pro Asn
915 920 925

Leu Gln Arg His Ser Asn Ser Leu Gly Pro Ile Phe Asp His Glu Asp
930 935 940

Leu Leu Lys Arg Lys Arg Lys Ile Leu Ser Ser Asp Asp Ser Leu Arg
945 950 955 960

Ser Ser Lys Leu Gln Ser His Met Arg His Ser Asp Ser Ile Ser Ser
965 970 975

Leu Ala Ser Glu Arg Glu Tyr Ile Thr Ser Leu Asp Leu Ser Ala Asn
980 985 990

Glu Leu Arg Asp Ile Asp Ala Leu Ser Gln Lys Cys Cys Ile Ser Val
995 1000 1005

His Leu Glu His Leu Glu Lys Leu Glu Leu His Gln Asn Ala Leu
1010 1015 1020

Thr Ser Phe Pro Gln Gln Leu Cys Glu Thr Leu Lys Ser Leu Thr
1025 1030 1035

His Leu Asp Leu His Ser Asn Lys Phe Thr Ser Phe Pro Ser Tyr
1040 1045 1050

Leu Leu Lys Met Ser Cys Ile Ala Asn Leu Asp Val Ser Arg Asn
1055 1060 1065

Asp Ile Gly Pro Ser Val Val Leu Asp Pro Thr Val Lys Cys Pro
1070 1075 1080

Thr Leu Lys Gln Phe Asn Leu Ser Tyr Asn Gln Leu Ser Phe Val
1085 1090 1095

Pro Glu Asn Leu Thr Asp Val Val Glu Lys Leu Glu Gln Leu Ile
1100 1105 1110

Leu Glu Gly Asn Lys Ile Ser Gly Ile Cys Ser Pro Leu Arg Leu
1115 1120 1125

Lys Glu Leu Lys Ile Leu Asn Leu Ser Lys Asn His Ile Ser Ser
1130 1135 1140

Leu Ser Glu Asn Phe Leu Glu Ala Cys Pro Lys Val Glu Ser Phe
1145 1150 1155

Ser Ala Arg Met Asn Phe Leu Ala Ala Met Pro Phe Leu Pro Pro
1160 1165 1170

Ser Met Thr Ile Leu Lys Leu Ser Gln Asn Lys Phe Ser Cys Ile
1175 1180 1185

Pro Glu Ala Ile Leu Asn Leu Pro His Leu Arg Ser Leu Asp Met
1190 1195 1200

Ser Ser Asn Asp Ile Gln Tyr Leu Pro Gly Pro Ala His Trp Lys
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Ser Leu Asn Leu Arg Glu Leu Leu Phe Ser His Asn Gln Ile Ser
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Ile Leu Asp Leu Ser Glu Lys Ala Tyr Leu Trp Ser Arg Val Glu
1235 1240 1245

Lys Leu His Leu Ser His Asn Lys Leu Lys Glu Ile Pro Pro Glu
1250 1255 1260

Ile Gly Cys Leu Glu Asn Leu Thr Ser Leu Asp Val Ser Tyr Asn
1265 1270 1275

Leu Glu Leu Arg Ser Phe Pro Asn Glu Met Gly Lys Leu Ser Lys
1280 1285 1290

Ile Trp Asp Leu Pro Leu Asp Glu Leu His Leu Asn Phe Asp Phe
1295 1300 1305

Lys His Ile Gly Cys Lys Ala Lys Asp Ile Ile Arg Phe Leu Gln
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Gln Arg Leu Lys Lys Ala Val Pro Tyr Asn Arg Met Lys Leu Met
1325 1330 1335

Ile Val Gly Asn Thr Gly Ser Gly Lys Thr Thr Leu Leu Gln Gln
1340 1345 1350

Leu Met Lys Thr Lys Ser Asp Leu Gly Met Gln Ser Ala Thr
1355 1360 1365

Val Gly Ile Asp Val Lys Asp Trp Pro Ile Gln Ile Arg Asp Lys
1370 1375 1380

Arg Lys Arg Asp Leu Val Leu Asn Val Trp Asp Phe Ala Gly Arg
1385 1390 1395

Glu Glu Phe Tyr Ser Thr His Pro His Phe Met Thr Gln Arg Ala
1400 1405 1410

Leu Tyr Leu Ala Val Tyr Asp Leu Ser Lys Gly Gln Ala Glu Val

1415 1420 1425

Asp Ala Met Lys Pro Trp Leu Phe Asn Ile Lys Ala Arg Ala Ser
1430 1435 1440

Ser Ser Pro Val Ile Leu Val Gly Thr His Leu Asp Val Ser Asp
1445 1450 1455

Glu Lys Gln Arg Lys Ala Cys Met Ser Lys Ile Thr Lys Glu Leu
1460 1465 1470

Leu Asn Lys Arg Gly Phe Pro Ala Ile Arg Asp Tyr His Phe Val
1475 1480 1485

Asn Ala Thr Glu Glu Ser Asp Ala Leu Ala Lys Leu Arg Lys Thr
1490 1495 1500

Ile Ile Asn Glu Ser Leu Asn Phe Lys Ile Arg Asp Gln Leu Val
1505 1510 1515

Val Gly Gln Leu Ile Pro Asp Cys Tyr Val Glu Leu Glu Lys Ile
1520 1525 1530

Ile Leu Ser Glu Arg Lys Asn Val Pro Ile Glu Phe Pro Val Ile
1535 1540 1545

Asp Arg Lys Arg Leu Leu Gln Leu Val Arg Glu Asn Gln Leu Gln
1550 1555 1560

Leu Asp Glu Asn Glu Leu Pro His Ala Val His Phe Leu Asn Glu
1565 1570 1575

Ser Gly Val Leu Leu His Phe Gln Asp Pro Ala Leu Gln Leu Ser
1580 1585 1590

Asp Leu Tyr Phe Val Glu Pro Lys Trp Leu Cys Lys Ile Met Ala
1595 1600 1605

Gln Ile Leu Thr Val Lys Val Glu Gly Cys Pro Lys His Pro Lys
1610 1615 1620

Gly Ile Ile Ser Arg Arg Asp Val Glu Lys Phe Leu Ser Lys Lys
1625 1630 1635

Arg Lys Phe Pro Lys Asn Tyr Met Ser Gln Tyr Phe Lys Leu Leu
1640 1645 1650

Glu Lys Phe Gln Ile Ala Leu Pro Ile Gly Glu Glu Tyr Leu Leu
1655 1660 1665

Val Pro Ser Ser Leu Ser Asp His Arg Pro Val Ile Glu Leu Pro
1670 1675 1680

His Cys Glu Asn Ser Glu Ile Ile Ile Arg Leu Tyr Glu Met Pro
1685 1690 1695

Tyr Phe Pro Met Gly Phe Trp Ser Arg Leu Ile Asn Arg Leu Leu
1700 1705 1710

Glu Ile Ser Pro Tyr Met Leu Ser Gly Arg Glu Arg Ala Leu Arg
1715 1720 1725

Pro Asn Arg Met Tyr Trp Arg Gln Gly Ile Tyr Leu Asn Trp Ser
1730 1735 1740

Pro Glu Ala Tyr Cys Leu Val Gly Ser Glu Val Leu Asp Asn His
1745 1750 1755

Pro Glu Ser Phe Leu Lys Ile Thr Val Pro Ser Cys Arg Lys Gly
1760 1765 1770

Cys Ile Leu Leu Gly Gln Val Val Asp His Ile Asp Ser Leu Met
1775 1780 1785

Glu Glu Trp Phe Pro Gly Leu Leu Glu Ile Asp Ile Cys Gly Glu
1790 1795 1800

Gly Glu Thr Leu Leu Lys Lys Trp Ala Leu Tyr Ser Phe Asn Asp
1805 1810 1815

Gly Glu Glu His Gln Lys Ile Leu Leu Asp Asp Leu Met Lys Lys
1820 1825 1830

Ala Glu Glu Gly Asp Leu Leu Val Asn Pro Asp Gln Pro Arg Leu
1835 1840 1845

Thr Ile Pro Ile Ser Gln Ile Ala Pro Asp Leu Ile Leu Ala Asp
1850 1855 1860

Leu Pro Arg Asn Ile Met Leu Asn Asn Asp Glu Leu Glu Phe Glu
1865 1870 1875

Gln Ala Pro Glu Phe Leu Leu Gly Asp Gly Ser Phe Gly Ser Val
1880 1885 1890

Tyr Arg Ala Ala Tyr Glu Gly Glu Glu Val Ala Val Lys Ile Phe
1895 1900 1905

Asn Lys His Thr Ser Leu Arg Leu Leu Arg Gln Glu Leu Val Val
1910 1915 1920

Leu Cys His Leu His His Pro Ser Leu Ile Ser Leu Leu Ala Ala
1925 1930 1935

Gly Ile Arg Pro Arg Met Leu Val Met Glu Leu Ala Ser Lys Gly
1940 1945 1950

Ser Leu Asp Arg Leu Leu Gln Gln Asp Lys Ala Ser Leu Thr Arg
1955 1960 1965

Thr Leu Gln